

MALLET et al  
Appl. No. 10/511,343  
Atty. Dkt. 3665-122  
Amendment  
November 26, 2008

**AMENDMENTS TO THE CLAIMS:**

Please amend the claims as follows:

Claims 1-34. (Canceled)

35. (Currently Amended) A plasmid or a recombinant viral vector [[suitable]] for *in vitro or ex vivo* transgene delivery into mammalian cells, wherein said vector comprises a chimeric genetic construct comprising a transgene operably linked to at least two distinct posttranscriptional regulatory elements functional in mammalian cells, each comprising a UTR region of a eukaryotic mRNA selected from a WPRE element, tau 3'UTR, TH3'UTR and APP5'UTR.

36. (Previously Presented) The vector of claim 35, wherein at least one posttranscriptional regulatory element confers increased stability to mRNAs.

Claims 37-42. (Canceled)

43. (Previously Presented) The vector of claim 35, wherein said WPRE element comprises SEQ ID NO: 1.

44. (Previously Presented) The vector of claim 35, wherein said APP5'UTR region comprises SEQ ID NO: 2.

45. (Previously Presented) The vector of claim 35, wherein said tau3'UTR region comprises SEQ ID NO: 3.

46. (Previously Presented) The vector of claim 35, wherein said TH3'UTR region comprises SEQ ID NO: 4.

47. (Previously Presented) The vector of claim 35, wherein said vector further comprises a promoter controlling transcription of the transgene in said mammalian cells.

48. (Previously Presented) The vector of claim 35, wherein said vector further comprises a marker gene.

49. (Previously Presented) The vector of claim 35, wherein said vector further comprises a polyadenylation signal operably linked to said transgene.

Claim 50. (Canceled)

51. (Previously Presented) The vector of claim 35, wherein said vector is selected from a replication-defective adenovirus, a replication-defective adeno-associated virus and a replication-defective retrovirus, including replication-defective lentiviruses.

52. (Previously Presented) The vector of claim 35, wherein the transgene is selected from a transgene coding for a growth factor, a neurotrophic factor, a cytokine, a ligand, a receptor, an immunoglobulin and an enzyme.

53. (Currently Amended) A recombinant cell comprising a plasmid or a recombinant viral [[a ]]vector [[suitable ]] for in vitro or ex vivo transgene delivery into mammalian cells, wherein said vector comprises a chimeric genetic construct

comprising a transgene operably linked to at least two distinct posttranscriptional regulatory elements functional in mammalian cells, each comprising a UTR region of a eukaryotic mRNA selected from a WPRE element, tau 3'UTR, TH3'UTR and APP5'UTR.

Claim 54. (Canceled)

Claim 55. (Canceled)

Claim 56. (Canceled)

Claim 57. (Canceled)

58. (Currently Amended) A method of expressing a transgene in a mammalian cell *in vitro* or *ex vivo*, the method ~~The method of claim 57,~~ comprising:

a) providing a plasmid or a recombinant viral vector ~~vector suitable for *in vitro* or *ex vivo* transgene delivery into mammalian cells,~~ wherein said vector comprises a chimeric genetic construct comprising a transgene operably linked to at least two distinct posttranscriptional regulatory elements functional in mammalian cells, each comprising a UTR region of a eukaryotic mRNA selected from a WPRE element, tau 3'UTR, TH3'UTR and APP5'UTR, and

b) introducing said vector into mammalian cells, said introduction causing expression of said transgene in said mammalian cells.

59. (Currently Amended) The method of claim [[57]]58, wherein said mammalian cells are neural cells.

60. (Currently Amended) The method of claim [[57]]58, wherein said mammalian cells are fibroblasts.

61. (Currently Amended) The method of claim [[57]]58, wherein said mammalian cell is a human cell or a rodent cell.

62. (Currently Amended) The method of claim [[57]]58, wherein the chimeric genetic construct is introduced into mammalian cells by virus-mediated infection.

63. (Currently Amended) The method of claim [[57]]58, wherein the chimeric genetic construct is introduced into cells by plasmid-mediated transfection.

64. (Currently Amended) A method of expressing *in vitro* or *ex vivo* a transgene in glial cells, the method comprising:

a) providing a plasmid or a recombinant viral vector comprising a chimeric genetic construct comprising said transgene operably linked to posttranscriptional regulatory elements comprising a WPRE element combined with a APP5'UTR, and

b) introducing said construct into glial cells, said introduction causing expression of said transgene in said glial cells.

65. (Currently Amended) A method of expressing *in vitro* or *ex vivo* a transgene in fibroblasts, the method comprising:

a) providing a plasmid or a recombinant viral vector comprising a chimeric genetic construct comprising said transgene operably linked to posttranscriptional regulatory elements comprising a WPRE element combined with a APP5'UTR, and

b) introducing said construct into fibroblasts, said introduction causing expression of said transgene in said fibroblasts.

66. (Currently Amended) A method of expressing *in vitro* or *ex vivo* a transgene in neuronal cells, the method comprising:

a) providing a plasmid or a recombinant viral vector comprising a chimeric genetic construct comprising said transgene operably linked to posttranscriptional regulatory elements comprising a WPRE element combined with a APP5'UTR and a tau3'UTR, and

b) introducing said construct into neuronal cells, said introduction causing expression of said transgene in said neuronal cells.

67. (Currently Amended) A method of expressing *in vitro* or *ex vivo* a transgene in neuronal cells, the method comprising:

a) providing a plasmid or a recombinant viral vector comprising a chimeric genetic construct comprising said transgene operably linked to posttranscriptional regulatory elements comprising a WPRE element combined with a APP5'UTR, a tau3'UTR and a TH3'UTR, and

b) introducing said construct into neuronal cells, said introduction causing expression of said transgene in said neuronal cells.

68. (New) A method of expressing *in vitro* or *ex vivo* a transgene in glial cells, the method comprising:

a) providing a plasmid comprising a chimeric genetic construct comprising said transgene operably linked to posttranscriptional regulatory elements comprising a WPRE element comprising SEQ ID NO: 1 combined with a APP5'UTR comprising SEQ ID NO: 2, and

b) introducing said plasmid into glial cells, said introduction causing expression of said transgene in said glial cells.

69. (New) A method of expressing *in vitro* or *ex vivo* a transgene in fibroblasts, the method comprising:

a) providing a plasmid comprising a chimeric genetic construct comprising said transgene operably linked to posttranscriptional regulatory elements comprising a WPRE element comprising SEQ ID NO: 1 combined with a APP5'UTR comprising SEQ ID NO: 2, and

b) introducing said plasmid into fibroblasts, said introduction causing expression of said transgene in said fibroblasts.

70. (New) A method of expressing *in vitro* or *ex vivo* a transgene in neuronal cells, the method comprising:

a) providing a plasmid comprising a chimeric genetic construct comprising said transgene operably linked to posttranscriptional regulatory elements comprising a

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WPRE element comprising SEQ ID NO: 1 combined with a APP5'UTR comprising SEQ ID NO: 2 and a tau3'UTR comprising SEQ ID NO: 3, and

b) introducing said plasmid into neuronal cells, said introduction causing expression of said transgene in said neuronal cells.

71. (New) A method of expressing *in vitro* or *ex vivo* a transgene in neuronal cells, the method comprising:

a) providing a plasmid comprising a chimeric genetic construct comprising said transgene operably linked to posttranscriptional regulatory elements comprising a WPRE element comprising SEQ ID NO: 1 combined with a APP5'UTR comprising SEQ ID NO: 2, a tau3'UTR comprising SEQ ID NO: 3 and a TH3'UTR comprising SEQ ID NO: 4, and

b) introducing said plasmid into neuronal cells, said introduction causing expression of said transgene in said neuronal cells.